

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 0 7 2019

REPLY TO THE ATTENTION OF

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Jeff French Operations Manager Barron County Waste to Energy Facility 575 10 1/2 Avenue Almena, Wisconsin 54805

Re: Finding of Violation

Barron County Waste to Energy Facility

Almena, Wisconsin

Dear Mr. French:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Barron County Waste to Energy Facility (you) under Section 113(a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(3). We find that you are violating Section 111(d) and 129 of the Act, 42 U.S.C. § 7411 and 42 U.S.C. § 7429, and their implementing regulations, and Title V of the Act, 42 U.S.C. § 7661 et. seq., and its implementing regulations at your Almena, Wisconsin facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Daniel Schaufelberger. You may call him at (312) 886-6814 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

Enclosure

cc: Maria Hill, Chief, Compliance, Enforcement, and Emission Inventory Section, Wisconsin Department of Natural Resources

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

| IN THE MATTER OF: |) |
|--|------------------------|
| Barron County Waste to Energy Facility |) FINDING OF VIOLATION |
| Almena, Wisconsin |) |
| |) |
| |) EPA-5-19-WI-01 |
| Proceedings Pursuant to |) |
| Section 113(a)(3) of the |) |
| Clean Air Act, 42 U.S.C. |) |
| § 7413(a)(3) |) |

FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Finding of Violation (FOV) to Barron County Waste to Energy Facility (BCW2E or you) to notify you that we have found violations of the Clean Air Act (the Act), 42 U.S.C. §§ 7401-7671q, and its implementing regulations at your facility located at 575 10 ½ Avenue, Almena, Wisconsin. The relevant statutory and regulatory background, factual background, finding of violations, and environmental impact of these violations are set forth in detail below.

This FOV is issued in accordance with Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3). The authority to issue this FOV has been delegated by the EPA Administrator to the Regional Administrator and re-delegated to the Director of the Air and Radiation Division for Region 5.

Statutory and Regulatory Background

Federal Plan Requirements for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 at 40 C.F.R. Part 62, Subpart JJJ

- 1. On January 31, 2003, EPA promulgated the Federal Plan Requirements for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (the Federal Plan), codified at 40 C.F.R. Part 62, Subpart JJJ. 68 Fed. Reg. 5158.
- 2. 40 C.F.R. § 62.15035(b) defines Class II small municipal waste combustion units as those units that are located at municipal waste combustion plants with aggregate plant combustion capacity of no more than 250 tons per day of municipal solid waste.
- 3. 40 C.F.R. § 62.15230 provides that the owner or operator of an affected municipal waste combustor unit conduct initial and annual stack tests to measure the emission levels of dioxins/furans (D/F), cadmium (Cd), lead (Pb), mercury (Hg), particulate matter (PM), opacity, hydrogen chloride (HCl), and fugitive ash.
- 4. 40 C.F.R. § 62.15160(a)(2) provides that after the date the initial stack test and continuous emissions monitoring system evaluation are required or completed, the Class II units must meet the applicable emission limits specified in table 4 of the subpart.

- 5. 40 C.F.R. § 62.15235 provides that an affected facility must use results of stack tests for D/F, Cd, Pb, Hg, PM, opacity, HCl, and fugitive ash to demonstrate compliance with the applicable emission limits in tables 2 and 4 of the subpart.
- 6. 40 C.F.R. § 62.15240(b) provides that an affected facility conducts each annual stack test no later than 13 months after the previous stack test for the applicable pollutants.
- 7. 40 C.F.R. § 62.15250(a) provides that an affected facility may test less often than annually if the facility owns or operates a Class II municipal waste combustion unit and if all stack tests for a given pollutant over 3 consecutive years show you comply with the emission limit. In this case, the facility is not required to conduct a stack test for that pollutant for the next 2 years. However, the facility must conduct another stack test within 36 months of the anniversary date of the third consecutive stack test that shows you comply with the emission limit. Thereafter, the facility must perform stack tests every third year but no later than 36 months following the previous stack tests. If a stack test shows noncompliance with an emission limit, the facility must conduct annual stack tests for that pollutant until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant. This provision applies to all pollutants subject to stack testing requirements: D/F, Cd, Pb, Hg, PM, opacity, HCl, and fugitive ash.
- 8. 40 C.F.R. § 62.15145(c) provides that if an affected municipal waste combustion unit uses activated carbon to control D/F or Hg emissions, the owner or operator must maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent D/F or Hg test.
- 9. 40 C.F.R. § 62.15310(b)(2) provides that affected municipal waste combustion units that use activated carbon to control D/F or Hg emissions, must keep records of the reasons for low carbon feed rates.
- 10. 40 C.F.R. § 62.15310(b)(3) provides that affected municipal waste combustion units that use activated carbon to control D/F or Hg emissions, must keep records of the corrective actions taken to meet the 8-hour average carbon feed rate requirement.
- 11. 40 C.F.R. § 62.15115(a)(2) provides that for plant-specific training, the affected facility must develop a specific operating manual for the plant by one year after the effective date of this subpart.
- 12. 40 C.F.R. § 62.15105(a)(2) provides that shift supervisors must complete the EPA operator training course.
- 13. 40 C.F.R. § 62.15105(b) provides that chief facility operators, shift supervisors, and control room operators must complete the EPA operator training course by the later of three dates: (1) one year after the effective date of this subpart; (2) six months after the municipal waste combustion unit starts up; or (3) the date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.

14. 40 C.F.R. § 62.15160(a)(2) provides, for small municipal combustion units subject to this subpart, an opacity limit of 10% for thirty 6-min averages. (Table 4 of Subpart JJJ of Part 62).

Title V

- 15. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), provides that it is unlawful for any person to, among other things, operate a major source subject to Title V except in compliance with a Title V permit after the effective date of any permit program approved or promulgated under Title V of the Act.
- 16. Pursuant to Section 502(b) of the Act, 42 U.S.C. § 7661a(b), EPA promulgated regulations establishing the minimum elements of a Title V permit program to be administered by any air pollution control agency. See 57 Fed. Reg. 32,295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
- 17. Section 502(d) of the Act, 42 U.S.C. § 7661a(d), provides that each state must submit to the EPA a permit program meeting the requirements of Title V.
- 18. EPA approved Wisconsin's Title V operating program on an interim basis on March 6, 1995, and fully approved the program on December 4, 2001. 60 Fed. Reg. 12128 and 66 Fed. Reg. 62951. Wisconsin's Title V operating permit program regulations are codified at Wisconsin Administrative Code Chapter 407 and are federally enforceable pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).
- 19. Pursuant to Section 501(2)(B) of the CAA, 42 U.S.C. § 7661, 40 C.F.R. § 70.2, and Wis. Admin. Code § 407.02(4)(b), a "major source" is defined, in part, as any stationary source that directly emits or has the potential to emit one hundred tons per year or more of any air contaminant subject to regulation under the Act.
- 20. Pursuant to 40 C.F.R. § 70.1(b), Wis. Admin. Code §§ 407.08 and 407.09, all sources subject to the Title V operating permit program, including major sources, shall have a permit to operate that assures compliance by the source with all applicable requirements.
- 21. On June 28, 2016, WDNR issued Title V Permit Renewal (Permit Number 603049040-P10) to BCW2E.
- 22. BCW2E Title V Permit Condition I.B.2.a.(1)(a) requires an affected facility to conduct an annual stack test no later than 13 months after the previous stack test for the applicable pollutant(s).
- 23. BCW2E Title V Permit Condition I.A.8.a.(1)(c) requires that Cd emissions from the exhaust gas of the waste combustor units not exceed 0.10 milligrams per dry standard cubic meter (mg/dscm) of exhaust gas at 7% oxygen (O₂).
- 24. BCW2E Title V Permit Condition I.B.2.a.(2) provides that an affected facility may test less often than annually if the facility owns or operates a Class II municipal waste combustion unit and if all stack tests for a given pollutant over 3 consecutive years show

you comply with the emission limit. In this case, the facility is not required to conduct a stack test for that pollutant for the next 2 years. However, the facility must conduct another stack test within 36 months of the anniversary date of the third consecutive stack test that shows you comply with the emission limit. Thereafter, the facility must perform stack tests every third year but no later than 36 months following the previous stack tests. If a stack test shows noncompliance with an emission limit, the facility must conduct annual stack tests for that pollutant until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant. This provision applies to all pollutants subject to stack testing requirements: D/F, Cd, Pb, Hg, PM, opacity, HCl, and fugitive ash.

- 25. BCW2E Title V Permit Condition I.B.1.a.(3)(a) provides that if an affected municipal waste combustion unit uses activated carbon to control D/F or Hg emissions, the owner or operator must maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent D/F or Hg test.
- 26. BCW2E Title V Permit Condition I.B.1.b.(1)(b)(ii) provides that affected municipal waste combustion units that use activated carbon to control D/F or Hg emissions, must keep records of the reasons for low carbon feed rates.
- 27. BCW2E Title V Permit Condition I.B.1.b.(1)(b)(iii) provides that affected municipal waste combustion units that use activated carbon to control D/F or Hg emissions, must keep records of the corrective actions taken to meet the 8-hour average carbon feed rate requirement.
- 28. BCW2E Title V Permit Condition I.B.6.a.(2)(a)1 provides that for plant-specific training, the affected facility must develop a specific operating manual for the plant by one year after the effective date of this subpart.
- 29. BCW2E Title V Permit Condition I.B.7.a.(1)(b) provides that shift supervisors must complete the EPA operator training course.
- 30. BCW2E Title V Permit Condition I.B.7.a.(2) provides that chief facility operators, shift supervisors, and control room operators must complete the EPA operator training course by the later of three dates: (1) one year after the effective date of this subpart; (2) six months after the municipal waste combustion unit starts up; or (3) the date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.
- 31. BCW2E Title V Permit Condition I.A.2.a.(1) provides, for BCW2E's stack S10 (the stack that the two municipal waste combustion units vent to), an opacity limit of 10% for 30 6-min averages. This limit applies at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction.

Relevant Factual Background

- 32. BCW2E owns and operates a municipal waste combustion facility at 575 10 1/2 Avenue, Almena, Wisconsin (the Facility).
- 33. At the Facility, BCW2E operates two Consumat Dual Chambered, Stepped Hearth, Starved Air Incinerators, installed in 1986, and rated at a combustion capacity of 100 tons per day.
- 34. BCW2E operates two Class II small municipal waste combustion units and is subject to the Federal Plan Requirements for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999 (the Federal Plan), codified at 40 C.F.R. Part 62, Subpart JJJ. 68 Fed. Reg. 5158.
- 35. BCW2E operates a "major source" of pollutants, as defined at 40 C.F.R. § 70.2.
- 36. BCW2E is subject to the requirements of Title V of the Act, 42 U.S.C. §§ 7661 et seq. and the Federal Plan Requirements for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999, 40 C.F.R. Part 62, Subpart JJJ.
- 37. BCW2E is currently operating under Title V Operation Permit Number 603049040-P10.
- 38. BCW2E utilizes activated carbon to control D/F and Hg emissions from its municipal waste combustion units.
- 39. From October 4 through 6, 2016, BCW2E conducted air emission compliance stack tests at the exhaust stack (S10) for its two municipal waste incinerators. The tests included an EPA Method 29 test for Cd, Pb, Cr, and Hg. The Cd results indicated a Cd concentration of 1.11 mg/dscm at 7% O₂.
- 40. On February 13, 2017, BCW2E conducted an air emission compliance stack test at the exhaust stack (S10) for its two municipal waste incinerators. The test was conducted in accordance with EPA Method 29 for Cd. The results indicated a Cd concentration of 0.0042 mg/dscm at 7% O₂.

Violations

- 41. From October 4, 2016 to February 13, 2017, BCW2E operated its municipal waste combustor units with Cd emissions in excess of 0.10 mg/dscm at 7% O₂ in violation of 40 C.F.R. § 62.15160(a)(2) and Title V Permit Condition I.A.8.a.(1)(c).
- 42. Because of the failed October 4, 2016 Cd stack test, BCW2E was required by 40 C.F.R. § 62.15250(a) and Title V Permit Condition I.B.2.a.(2) to conduct annual stack tests until three consecutive years show compliance with the Cd limit. BCW2E failed to conduct an annual stack test for Cd (within the first annual date of March 13, 2018) as required by 40 C.F.R. § 62.15250(a) and Title V Permit Condition I.B.2.a.(2).

- 43. From February 1 through February 27, 2018, BCW2E failed to maintain the minimum 8-hour block average activated carbon feed rate of 24.13 rotations per minute as established during the most recent D/F and Hg stack test of October 5-6, 2016. This is a violation of 40 C.F.R. § 62.15145(c) and Title V Permit Condition I.B.1.a.(3)(a).
- 44. From February 1 through February 27, 2018, BCW2E failed to record the reason for the low carbon feed rates described in Paragraph 44, in violation of 40 C.F.R. 62.15310(b)(2) and Title V Permit Condition I.B.1.b.(1)(b)(ii).
- 45. From February 1 through February 27, 2018, BCW2E failed to record the corrective actions taken to meet the 8-hour average carbon feed rate described in Paragraph 44, in violation of 40 C.F.R. 62.15310(b)(3) and Title V Permit Condition I.B.1.b.(1)(b)(iii).
- 46. BCW2E failed to develop a specific operating manual for the plant by one year after the effective date of 40 C.F.R. Part 62, Subpart JJJ, in violation of 40 C.F.R. § 62.15115(a)(2) and Title V Permit Condition I.B.6.a.(2)(a)1.
- 47. In violation of 40 C.F.R. § 62.15105(b) and Title V Permit Condition I.B.7.a.(2)(a)(2), BCW2E shift supervisors failed to complete the EPA operator training course by the later of three dates: (1) one year after the effective date of this subpart; (2) six months after the municipal waste combustion unit starts up; or (3) the date before an employee assumes responsibilities that affect operation of the municipal waste combustion units.
- 48. On September 15, 2017, BCW2E recorded stack opacity averages, at municipal combustion unit exhaust stack S10, over 10% for 32 consecutive 6-minute averages, in violation of 40 C.F.R. § 62.15160(a)(2) and Title V Permit Condition I.A.2.a.(1).

3/7/19

Edward Nam

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I certify that I sent a Finding of Violation, No. EPA-5-19-WI-01, by Certified Mail,

Return Receipt Requested, to:

Jeff French
Operations Manager
Barron County Waste to Energy and
Recycling Facility
575 10 ½ Avenue
Almena, Wisconsin 54805

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Maria Hill, Chief
Compliance, Enforcement, and Emission Inventory
Section
Air Management Program
Environmental Protection Division
Wisconsin Department of Natural Resources
Maria.Hill@wisconsin.gov

On the May of Much 2019.

Kathy Jones

Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 10170,600600366,9202